



A Simple Technique to Decrease Peritonitis Rates

Irma Funes, RN CNN Kevin W. Nash, MD John Moran, MB BS

Introduction



- ➤ We outline a simple technique developed in a WellBound home dialysis training center (Center 1) in response to elevated peritonitis rates in PD patients (1 episode per 18-20 patient months)
- Although considered unacceptable these rates were in fact not higher than those considered the minimum standard in the 2005 ISPD guidelines (1 episode per 18 patient months).





Initial steps

- ➤ In May 2005 we introduced several interventions
 - Retraining of all patients
 - Longer training period
 - Monthly aseptic technique reinforcement (including hand washing and wearing a mask)
- ➤ This led to some improvement in peritonitis rates to 1 episode per 26 patient months
- ➤ A fishbone analysis suggested that the likely cause of the episodes was contamination of the transfer set during connection or disconnection.







- ➤ Alcavis 50 (Alcavis HDC LLC, Gaithersburg, MD) is a 0.55% solution of sodium hypochlorite in normal saline
- Two additional steps were introduced whereby the patient cleans the transfer set with Alcavis 50
- ➤ The patient uses a 2 x 2 soaked with Alcavis and allows it to air dry:
 - Prior to removing the minicap
 - Before disconnecting from the cycler or manual exchange



Results with Alcavis



- We saw marked improvement immediately
- ➤ The peritonitis rates went from 1:26 to 1:42 over 6 months
- The improvement has been maintained
 - > Over the last 12 months the peritonitis rate was 1:48
- ➤ We found that patients who used to get frequent infections had none in the year after we introduced the new policy.



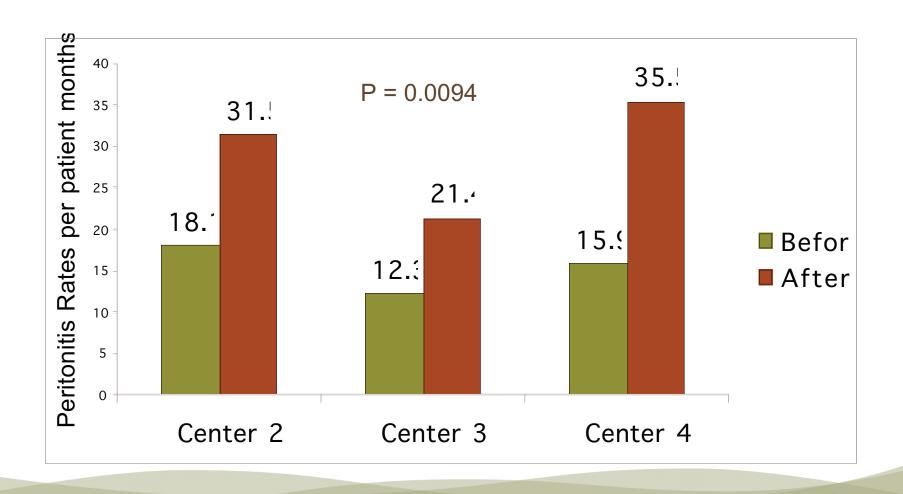


- ➤ Given the successful results, Alcavis was then introduced at 3 other WellBound centers (Centers 2, 3, 4)
- ➤ We now report 12 months of experience in Center 2 and 10 months in Centers 3 and 4
- All 3 centers showed a marked improvement in peritonitis rates



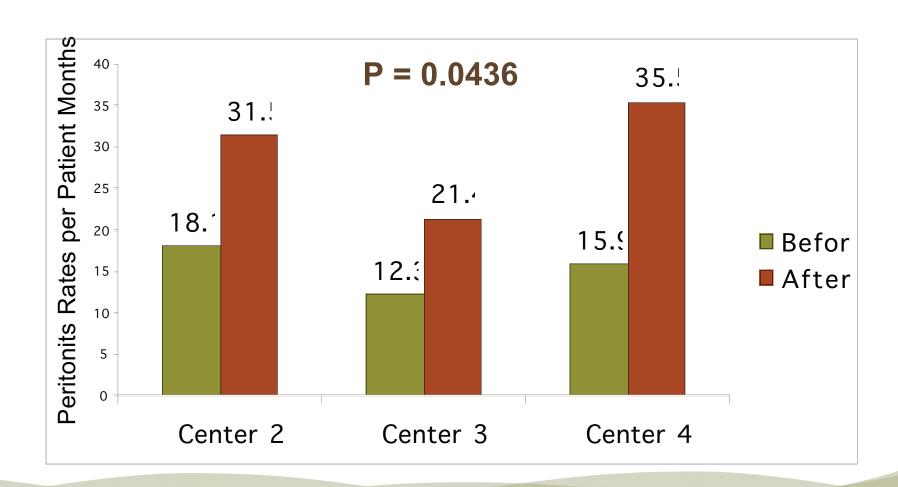






Center Effect:







Benefits



- Decreased Peritonitis Episodes
- Decreased Hospitalizations
- Decreased Overall Patient Care Cost
 - Nursing Time
 - > Supplies/Antibiotics
 - Decreased Hospitalizations
- Protect Peritoneal Membrane from Scarring



Cost?



- ➤ One bottle of Alcavis 50 costs \$8-\$10 / bottle
- > This will last 1-2 months
- There are obvious savings in antibiotics, hospitalizations and nurse time!

Conclusion



- Using Alcavis in this way improves overall patient peritonitis rates
- In conjunction with this new procedure, extended training time and patient education remains an important component to decrease infections and improve patient outcomes
- Improved peritonitis rate significantly affects overall patient outcomes



Contact information



- > funesi@wellbound.com
- www.satellitehealth.com